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10/591,805	01/09/2007	Markus Pernegger	PERNEGGER ET AL-1 PCT	4737
25889	7590	04/02/2009	EXAMINER	
COLLARD & ROE, P.C. 1077 NORTHERN BOULEVARD ROSLYN, NY 11576			DANG, KET D	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary**Application No.**

10/591,805

Applicant(s)

PERNEGGER ET AL.

Examiner

KET DANG

Art Unit

4118

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/US)
Paper No(s)/Mail Date 01/09/2007
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. PCT/AT2005/000069, filed on March 4, 2005.

Specification

2. The abstract of the disclosure is objected to because it has more than 150 words. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 1, 4, 7-8, 15-19, 20, 22-24, & 26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. Regarding claim 1, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).
6. Regarding claims 1, 23-24, & 26, the phrase "for example" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

7. Regarding claim 1, the phrase "etc." renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d). Such "etc" is indefinite per se.
8. Regarding claim 1, 7-8, 16-17, 22, & 26, the phrase "and/or" renders the claim indefinite is indefinite per se.
9. Regarding claim 1, 4, 15, and 18-19, the phrase "can be" renders the claim indefinite for not providing positive limitation.
10. Regarding claims 17 & 20, "parameter group (21)" is indefinite because the reference number "(21)" already refers to as "water container" in specification.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 1-8 and 16-26 are rejected under 35 U.S.C. 102(b) as being anticipated by DeCoster et al. (US 6,103,994).
13. Regarding claim 1, DeCoster et al. disclose a method of controlling a welding apparatus 10 (Fig. 1) whereby individual welding parameters, such as a current intensity (Abstract), a rod feed rate (Col. 7, lines 7-9), a welding process (Abstract), a frequency (Col. 1, lines 30-38), for example, can be set by the user in the form of a welding job 14 (Fig. 1) for a specific welding process by means of a first control unit 12 (Fig.1) hard-wired to or integrated in the welding apparatus, and several such welding jobs 14 (Fig.

1) can be stored in a memory device 18 (Fig. 1), and by selecting a welding job 14 (Fig. 1) using the first control unit 12 (Fig.1), the welding apparatus 10 (Fig. 1) and the components of the welding system, such as a power component 20 (Fig. 1), a rod feed device (Col. 7, lines 7-9) etc., for example, can be activated on the basis of the parameters stored therein by means of a control system, in particular a microprocessor controller 16 (Fig. 1) , and when a second control unit 28 (Fig.1) is operated, in particular a push-button element 74/76 (Fig. 2) disposed on the welding torch (Col. 4, lines 25-29), a start signal is sent to the control system in order to initiate the welding operation, wherein a control signal (Col. 2, lines 29-57) is generated by the push-button element of the second control unit 28 (Fig. 1), in other words of the welding torch (Col. 4, lines 25-29), and before starting the welding operation, a selection or switch is made between the individual stored welding jobs 90, 92, 94, 96 (Fig. 2) by means of the control signal and/or the start-up of the welding operation can be run by generating the start signal via the same push-button element 74/76 (Fig. 2) (Col. 5, lines 45-54).

14. Regarding claims 2-8, DeCoster et al. disclose a method of controlling a welding apparatus 10 (Fig. 1) wherein the parameters for an individual welding job are organized in parameter groups 50 (Fig. 2, for example, memory group) (Col. 5, lines 11-25), and the different welding jobs are stored in the memory device 18 (Fig. 1) in a fixed sequence 60, 62, 64, & 66 (Fig. 2); wherein the welding jobs are stored in the memory device so that they are clearly identified (See memory arrangement in figure 2); wherein the welding jobs are organized in individual job groups from which at least one welding job can be retrieved (Col. 4, lines 55-63); wherein the job groups containing one or more

welding jobs (Col. 7, lines 1-12) are stored in the memory device 18 (Fig. 1) so that they are separated from one another by means of empty jobs, in other words a welding job in which no parameters have been set (Col. 7, lines 62-67); wherein at the end of a job group, the last welding job is stored in the memory device with an indicator 56/58 (Fig. 2) for a separator signal; wherein the curve of the output signal of the push-button, in particular the push-button element, is used to define the control signal (Col. 5, lines 35-48), and the start signal on the basis of its frequency 76 (Fig. 2); wherein a comparison is run between the output signal generated by the push-button or push-button element (Col. 8, lines 12-28) and several possible control signals previously set up in the memory device 18 (Fig. 1) (Col. 6, lines 13-20), and the start signal on the basis of their frequency 76 (Fig. 2).

15. Regarding claims 16-18, DeCoster et al. disclose wherein a check (Col. 8, lines 12-28) is run on the selected welding jobs by the microprocessor controller 16 (Fig. 1) to ensure that threshold values of the individual parameters have been complied with and a visual warning 50 (Fig. 2) (Col. 5, lines 7-10) is emitted by the first and/or second control unit 12/28 (Fig. 1) if necessary; wherein the parameters of the respective welding job selected are displayed 50 (Fig. 1) by the first and/or second control unit 12/28 (Fig. 1); and wherein during a welding operation, a selection and switch can be made between the individual welding jobs by means of the control signal generated by the second control unit 28 (Fig. 1) (Col. 6, lines 13-20).

16. Regarding claim 19, DeCoster et al. disclose a control system for a welding apparatus 10 (Fig. 1), comprising a first control 12 (Fig. 1), a microprocessor controller

16 (Fig. 1), comprising a memory device 18 (Fig. 1) and a power component 20 (Fig. 1), and the different parameters (Abstract) can be set in the form of welding jobs 14 (Fig. 1) 50 (Fig. 2) by means of the first control unit and the welding apparatus 10 (Fig. 1) can be activated by the power component 20 (Fig. 1) on the basis of these parameters 50 (Fig. 2), and a second control unit 28 (Fig. 1) on which a push-button element 14 (Fig. 1) 50 (Fig. 2) is disposed for generating a start signal, in particular for running the method according to claim 1, is provided on the welding torch (Col. 4, lines 25-29) of the welding apparatus which is hard-wired to the microprocessor controller 16 (Fig. 1), wherein the microprocessor controller 16 (Fig. 1) has an element for evaluating a control signal generated by the second control unit 28 (Fig. 1) before starting the welding operation, and the second control unit 28 (Fig. 1) for switching the welding jobs and for starting the welding process is nothing more than the push-button element 50 (Fig. 2) (Col. 4, lines 55 – Col. 5, lines 2).

17. Regarding claims 20-28, DeCoster et al. disclose a control system wherein the parameters for the welding jobs 50 (Fig. 2) are stored in the memory device 18 (Fig. 1) in parameter groups; wherein the individual welding jobs are separated from one another by empty groups; wherein the second control unit 28 (Fig. 1) has a visual output device 50 (Fig. 2) for warning messages and/or information (Col. 5, lines 7-10); wherein the visual output device 50 (Fig. 2) is provided in the form of one or more control lamps, for example LEDs 56/58 (Fig. 2) (Col. 5, lines 57-62); wherein the visual output device is provided in the form of a display, for example an LCD (Col. 5, lines 7-10); wherein the second control unit 28 (Fig. 1), in particular the welding torch (Col. 4, lines 25-29), is

connected to the control system via a two-terminal electric cable 24/26 (Fig. 1) (Col. 4, lines 19-29); wherein the first control unit 12 (Fig. 1) has an input device 14 (Fig. 1), for example in the form of a key pad, as well as a visual output device (Col. 5, lines 7-10), for example in the form of a display, for warning messages and/or information and is hard-wired to the microprocessor controller 16 (Fig. 1) (Col. 3, lines 57 – Col. 4, lines 9); and wherein the first control unit 12 (Fig. 1) and the microprocessor controller 16 (Fig. 1) are provided in the form of a standard computer, separate from the welding apparatus 10 (Fig. 1), via an appropriate interface 14 (Fig. 1) as a means of controlling a MIG (Col. 7, lines 5-8) welding apparatus

Claim Rejections - 35 USC § 103

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

19. Claims 9-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeCoster et al. (US 6,103,994).

20. Regarding claims 9- 15, DeCoster et al. disclose all the claimed invention except for wherein the start signal for starting the welding process is defined by a longer depression of the push-button than the control signal for selecting the welding job 50 (Fig. 2) (Col. 1, lines 35-46); wherein, on an appropriate control signal, in particular if the push-button element 74/76 (Fig. 2) is depressed for a shorter time, the next welding job

in the sequence is selected from the memory device (See the recitation of DeCoster as follows:

"A plurality of memory selectors 90, 92, 94, 96 allow the operator to save in memory 18 various configurations of the parameter selectors. Each memory selector may be pressed to recall from memory 18 to control circuit 16 a set of previously selected or programmed operating parameters, some or all of which control circuit 16 can communicate to control panel 50 for display to the operator".

The above recitation is read on to claim 9-15, see motivation below); wherein, on an appropriate control signal, after the last welding job stored in the memory device , the first welding job stored in this job group is selected (Col. 6, lines 41-67); wherein, on an appropriate control signal, in particular if the push-button element is depressed for a medium length of time, the next job group in the sequence after the last empty group (Col. 6, lines 41-67); wherein, on an appropriate control signal, the next job group in the sequence after the preceding empty group is selected from the memory device (See the recitation of DeCoster above); wherein, on an appropriate control signal, the first job group stored in the memory device is selected (See the recitation of DeCoster above); and wherein any number of jobs can be defined by the user in a job group 14 (Fig. 1). It would have been obvious to one having ordinary skill in the art at the time the invention was made to suggest that welding jobs stored in memory can be programmed or configured to read in any order as operator desires by simply pressing and holding the push-button for the length of time is needed to select particular welding job, either first job or last job or middle job and so on, since it has been held that constructing a

formerly integral structure in various elements involves only routine skill in the art.

Nerwin v. Erlichman, 168 USPQ 177, 179.

21. Claims 27 & 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeCoster et al. (US 6,103,994) in view of Brunner et al. (US 6,570,132 B1).

22. Regarding claims 27 & 28, DeCoster discloses the claimed invention, except for a standard computer and a MAG welding. However, Brunner et al. teach a standard computer (Col. 6, lines 48-53) and a MAG welding (Col. 3, lines 27-31). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify the DeCoster's reference, to include a standard computer and a MAG welding, as suggested and taught by Brunner, for the purpose of allowing welding operator to modify or change inputs of welding parameters more effectively, and also be able to exchange data and communicate with other welding units, and also other welding type such as a MAG welding (Col. 6, lines 37-48).

Conclusion

23. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Davis et al. (US 5,343,016) disclose microprocessor controlled welding apparatus. Kojima et al. (US 4,973,814) disclose controller for resistance welding machine. And Miyagawa (US 4,717,805) disclose resistance welding control with menu type user interface.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KET DANG whose telephone number is (571)270-7827. The examiner can normally be reached on Monday - Friday, 7:30 - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoang Tu can be reached on (571)272-4780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/K.D./
Examiner Art Unit 4118

/TU B HOANG/
Supervisory Patent Examiner, Art Unit 3742